IBM S3500 1.8-inch Enterprise SSDs, S3500 2.5-inch HS and SS Enterprise SSDs, and 3.5-inch MLC HS SSDs for System x

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At a glance

IBM® S3500 1.8-inch and 2.5-inch solid-state drives

The new S3500 solid-state drives (SSDs) provide an affordable, reliable, and performance-driven solution for high-capacity, read-intensive applications by employing a 6 Gbps SATA interface and cost-effective MLC NAND technology. These drives present an opportunity for you to simplify your local storage infrastructure to help maintain overall maintenance and cooling cost, while considering remote storage solutions for end-to-end data availability.

Benefits include:

- High capacities in 1.8-inch and 2.5-inch form factors that fit into a conventional disk-drive bay
- Industry-leading cost-effective MLC NAND technology with high read performance of random 4 KB reads, up to 72,000 IOPS
- Enhanced power-loss data protection, which reduces potential data loss by detecting and protecting data from an unexpected system power loss
- Enterprise data protection to ensure NAND integrity
- Rigorous testing through the ServerProven® program for the storage subsystem, which instills confidence that your storage subsystem is compatible and will function reliably
- 2.5-inch SSDs available as either HS or SS drives

IBM 200 GB, 400 GB, and 800 GB 3.5-inch SAS SSDs

The 200 GB, 400 GB, and 800 GB SSDs provide a high-performance, reliable solution for high-capacity Enterprise applications with a moderate read/write mix by employing a 6 Gbps SAS interface and MLC NAND technology. These solid-state drives present an opportunity for you to simplify your local storage infrastructure to help maintain overall maintenance and cooling cost, while considering remote storage solutions for end-to-end data availability.

Benefits include:

- 3.5-inch form factor that fits into a conventional disk-drive bay
- 200 GB, 400 GB, and 800 GB capacities to accommodate loading applications along with OS booting
- Cost-effective MLC NAND technology with high read and write performance
- Enterprise data protection to ensure NAND integrity

- Rigorous testing through the ServerProven program, which instills confidence that your storage subsystem is compatible and will function reliably

All SSDs offer a 1-year limited warranty, or system warranty.

Overview

IBM S3500 1.8-inch and 2.5-inch SSDs

The S3500 1.8-inch and 2.5-inch solid-state drives for IBM System x® offer an affordable, reliable, performance-driven solution for read-intensive applications using a 6 Gbps SATA interface and MLC NAND technology.

These SSDs utilize NAND Flash Memory technology to achieve high read performance of random 4 KB reads, up to 72,000 IOPS. Packaged in an HDD replacement enclosure, these SSDs integrate easily in existing storage infrastructures. They are targeted at applications that require high I/O performance in random read operations in applications such as web or video serving or content delivery.

Providing that additional peace of mind, these S3500 solid-state drives are covered under IBM warranty. These drives carry a 1-year limited warranty, or when installed in a System x server, these drives assume your system's base warranty. Solid-state devices do have finite write or P/E cycles, which are listed as Total Bytes Written (TBW). See limitations and the device specifications for details.

Features and functions:

S3500 80 GB, 240 GB, and 400 GB 1.8-inch and 120 GB, 240 GB, 480 GB, and 800 GB 2.5-inch SATA MLC Enterprise Value SSDs for IBM System x

- 1.8-inch and 2.5-inch industry-standard form factors
- Industry-leading cost-effective MLC NAND technology with high read performance of random 4 KB reads, up to 72,000 IOPS
- MLC SATA drive specifically designed to fulfill client needs in the Enterprise Value space
- Enhanced power-loss data protection which reduces potential data loss by detecting and protecting data from an unexpected system power loss
- Robust end-to-end data path protection
- The absence of moving parts, which reduces potential failure points in the server

IBM 200 GB, 400 GB, and 800 GB SAS 3.5-inch MLC HS Enterprise SSDs

The new IBM 200 GB, 400 GB, and 800 GB solid-state drives employ enterprise MLC NAND technology to bring an affordable solution with industry-leading read and write performance for applications requiring enterprise workloads with a read-write mix. The new SSDs will be available in 3.5-inch options.

These SSDs use a single-chip controller with a SAS interface on the system side and NAND Flash internally. Packaged in an HDD replacement enclosure, these SSDs integrate easily in existing storage infrastructures. They are targeted at databases that require high I/O performance in random read and random write operations, including applications caching and tiering.

Features and functions:

200 GB, 400 GB, and 800 GB 3.5-inch MLC SAS SSDs for IBM System x

- High capacities in 3.5-inch industry-standard form factors
- Industry-leading 24nm MLC
- Cost-effective MLC NAND technology

- MLC SAS drive with industry-leading read and write performance to fulfill client needs in the Enterprise space
- High endurance to withstand applications with moderate read-write workloads
- Power Back-up Circuitry that ensures that user data in transit is committed to flash in the event of a power failure
- Temperature management, which ensures that the drive does not overheat and operate out of spec
- The absence of moving parts, which reduces potential failure points in the server

Warranty

S3500 80 GB, 240 GB, and 400 GB SATA 1.8-inch, 120 GB, 240 GB, 480 GB, and 800 GB SATA 2.5-inch Enterprise Value, and 200 GB, 400 GB, and 800 GB SAS 3.5-inch MLC Enterprise SSDs offer a 1-year limited warranty[1] .

Solid-state memory cells have an intrinsic, finite number of program/erase cycles that each cell can incur. As a result, solid-state storage has a maximum amount of program/erase cycles to which it can be subjected. IBM's warranty for the solid-state storage is limited to devices that have not reached the maximum guaranteed number of program/erase cycles, as documented in the *Official Published Specifications* for the product. A drive that reaches this limit may fail to operate according to its specifications.

[1] For information on the IBM Statement of Limited Warranty, visit

http://www.ibm.com/servers/support/machine_warranties/

Alternatively, this information is available through your IBM representative or reseller. Copies are available upon request.

With respect to on-site service, IBM sends a technician after attempting to diagnose and resolve the problem remotely.

Key prerequisites

IBM System x or BladeCenter® system with SATA or SAS capability depending on drives selected

Planned availability date

August 27, 2013

Description

S3500 80 GB, 240 GB, and 400 GB SATA 1.8-inch, 120 GB, 240 GB, 480 GB, and 800 GB SATA 2.5-inch MLC Enterprise Value, and 200 GB, 400 GB, and 800 GB SAS 3.5-inch MLC Enterprise SSDs

These new drives bring solid-state reliability and low-power capabilities to System x storage. These new options are available as single 1.8-inch and 2.5-inch SATA, or 3.5-inch SAS MLC drives.

Product positioning

These high-performance SAS MLC Enterprise and SATA MLC Enterprise Value SSD options are positioned in the family of IBM SATA and SAS SSDs based on solid-state technology.

These SSD drives support enterprise-value server and workstation applications, such as:

- Transaction processing
- Data mining
- Data warehousing
- Professional video and graphics

Product number

Description	Type	Model	Feat	SEO	Part number
S3500 80 GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	3331	HC1	A4KV	00AJ040	00AJ040
S3500 240 GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	3331	HC1	A4KW	00AJ045	00AJ045
S3500 400 GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	3331	HC1	A4KX	00AJ050	00AJ050
S3500 120 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	A4KM	00AJ000	00AJ000
S3500 120 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	A4KR	00AJ020	00AJ020
S3500 240 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	A4KN	00AJ005	00AJ005
S3500 240 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	A4KS	00AJ025	00AJ025
S3500 480 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	A4KP	00AJ010	00AJ010
S3500 480 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	A4KT	00AJ030	00AJ030
S3500 800 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	A4KQ	00AJ015	00AJ015
S3500 800 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	A4KU	00AJ035	00AJ035
IBM 200 GB SAS 3.5-inch MLC HS Enterprise SSD	3331	HC1	A3HT	00W1306	00W1306
IBM 400 GB SAS 3.5-inch MLC HS Enterprise SSD	3331	HC1	A4N8	00W1311	00W1311
IBM 800 GB SAS 3.5-inch MLC HS Enterprise SSD	3331	HC1	A4N9	00W1316	00W1316

The following are features already announced for the 2582, 2583, 3331, 7143, 7147, 7160, 7382, 7383, 7870, 7873, 7875, 7906, 7912, 7914, 7915, 7917, 8038, 8722, and 8737 machine types:

Description	MT	Model	Feature
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	2582	AC1 MC1	A4KM
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	2583	AC1 MC1	

S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7143	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7147	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7160	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7382	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7383	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7870	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7875	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7906	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7914	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7915	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7917	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8038	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8722	AC1 MC1	
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8737	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	2582	AC1 MC1	A4KN
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	2583	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7143	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7147	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7160	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7382	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7383	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7870	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7875	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD			

for IBM System x	7906	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7914	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7915	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7917	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8038	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8722	AC1 MC1	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8737	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	2582	AC1 MC1	A4KP
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	2583	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7143	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7147	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7160	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7382	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7383	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7870	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7875	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7906	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7914	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7915	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7917	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8038	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8722	AC1 MC1	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8737	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	2582	AC1 MC1	A4KQ
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD			

for IBM System x	2583	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7143	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7147	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7160	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7382	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7383	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7870	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7875	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7906	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7914	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7915	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	7917	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8038	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8722	AC1 MC1	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	8737	AC1 MC1	
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	2583	AC1 MC1	A4KR
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	7160	AC1 MC1	
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	7912	AC1 MC1	
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	2583	AC1 MC1	A4KS
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	7160	AC1 MC1	
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	7912	AC1 MC1	
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	2583	AC1 MC1	A4KT
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD			

for IBM System x	7160	AC1 MC1	
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	7912	AC1 MC1	
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	2583	AC1 MC1	A4KU
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	3331	HC1	
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	7160	AC1 MC1	
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	7912	AC1 MC1	
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	3331	HC1	A4KV
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7143	AC1 MC1	
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7147	AC1 MC1	
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7873	AC1 MC1	
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7912	AC1 MC1	
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7915	AC1 MC1	
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	8722	AC1 MC1	
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	3331	HC1	A4KW
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7143	AC1 MC1	
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7147	AC1 MC1	
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7873	AC1 MC1	
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7915	AC1 MC1	
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	8722	AC1 MC1	
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	3331	HC1	A4KX
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7143	AC1 MC1	
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7147	AC1 MC1	
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7873	AC1 MC1	
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	7915	AC1 MC1	
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	8722	AC1 MC1	
IBM 200GB SAS 3.5" MLC HS Enterprise SSD	3331	HC1	A3HT
IBM 400GB SAS 3.5" MLC HS Enterprise SSD	3331	HC1	A4N8
IBM 800GB SAS 3.5" MLC HS Enterprise SSD	3331	HC1	A4N9

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM , you may link directly to Business Partner information for this announcement. A PartnerWorld® ID and password are required (use IBM ID).

https://www.ibm.com/partnerworld/mem/sla.jsp?num=113-137

Publications

Publications are shipped with the announced products.

The IBM Systems Information Center provides you with a single information center where you can access product documentation for IBM systems hardware, operating systems, and server software. Through a consistent framework, you can efficiently find information and personalize your access. The IBM Systems Information Center is at

http://publib14.boulder.ibm.com/infocenter/systems

IBM Publications Center Portal

http://www.ibm.com/shop/publications/order

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided, as well as payment options via credit card. A large number of publications are available online in various file formats, which can currently be downloaded free of charge.

Displayable softcopy publications

None.

Source file publications

None.

Services

Global Technology Services®

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an on-demand business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

For details on available services, contact your IBM representative or visit

http://www.ibm.com/services/

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

http://www.ibm.com/services/continuity

For details on education offerings related to specific products, visit

http://www.ibm.com/services/learning/index.html

Select your country, and then select the product as the category.

System x and BladeCenter support services

Recommended core technical support

When you buy IBM System x technology, include the support services you need -- to help keep both your hardware and software working for you, day after day, at peak performance. It's your first step toward helping to protect your investment and sustain high levels of system availability. We offer service-level and response-time options to fit your business needs. And we'll help you get started with a core support package that includes:

- **Continuous system monitoring**

  Electronic monitoring that helps speed up problem-solving with automated, early detection of potential problems and system errors.

- **Hardware maintenance**

  World-class remote and on-site hardware problem determination and repair services.

- **Software technical support**

  Access to help line calls for fast, accurate answers to your questions during installation and throughout ongoing operations.

For more information, visit

http://www.ibm.com/servers/eserver/xseries/services.html

Technical information

Specified operating environment

Physical specifications

S3500 80 GB, 240 GB, and 400 GB SATA 1.8-inch MLC Enterprise Value SSDs

- Approximate height: 5.0 mm (0.20 in)
- Approximate width: 54.0 mm (2.13 in)
- Approximate depth: 78.5 mm (3.10 in)
- Approximate weight: 49 g (0.11 lb)

S3500 120 GB and 240 GB SATA 2.5-inch MLC HS and SS Enterprise Value SSDs

- Approximate height: 7.0 mm (0.27 in)
- Approximate width: 69.85 mm (2.75 in)
- Approximate depth: 100.45 mm (3.95 in)
- Approximate weight: 70 g (0.15 lb)

S3500 480 GB and 800 GB SATA 2.5-inch MLC HS and SS Enterprise Value SSDs

- Approximate height: 7.0 mm (0.27 in)
- Approximate width: 69.85 mm (2.75 in)
- Approximate depth: 100.45 mm (3.95 in)
- Approximate weight: 74 g (0.16 lb)

IBM 200 GB, 400 GB, and 800 GB SAS 3.5-inch MLC Enterprise SSDs

- Approximate height: 9.5 mm (0.37 in)

- Approximate width: 69.9 mm (2.75 in)
- Approximate depth: 99.8 mm (3.93 in)
- Approximate weight: 121.48 g (0.27 lb)

Shipping dimensions

S3500 120 GB and 240 GB SATA 2.5-inch MLC Enterprise Value SSDs

- Height: 133.0 mm (5.24 in)
- Width: 63.0 mm (2.48 in)
- Depth: 174.0 mm (6.85 in)
- Weight: 430 g (0.95 lb)

S3500 480 GB and 800 GB SATA 2.5-inch MLC Enterprise Value SSDs

- Height: 133.0 mm (5.24 in)
- Width: 63.0 mm (2.48 in)
- Depth: 174.0 mm (6.85 in)
- Weight: 434 g (0.96 lb)

S3500 80 GB, 240 GB, and 400 GB SATA 1.8-inch MLC Enterprise Value SSDs

- Height: 32.0 mm (1.26 in)
- Width: 150.0 mm (5.90 in)
- Depth: 226.0 mm (8.89 in)
- Weight: 399 g (0.88 lb)

IBM 200 GB, 400 GB, and 800 GB SAS 3.5-inch MLC Enterprise SSDs

- Height: 63.0 mm (2.48 in)
- Width: 133.0 mm (5.24 in)
- Depth: 174.0 mm (6.85 in)
- Weight: 484 g (1.07 lb)

Agency approvals

For S3500 1.8-inch and 2.5-inch SSDs

- UL
- CB
- CE Mark
- C-Tick Mark
- Taiwan (BSMI Certification)
- KCC
- VCCI

For IBM 3.5-inch SAS SSDs

- UL
- CSA
- EMC
- FCC
- CE Mark
- C-Tick Mark
- BSMI (Taiwan)

- KCC (Korea EMI)

Standards

None

Operating environment

Temperature: 0°C to 70°C (32°F to 158°F)

Relative humidity: 8% to 85% (noncondensing)

Maximum altitude: 3,050 m (10,000 ft)

Homologation

This product is not certified for direct connection by any means whatsoever to interfaces of public telecommunications networks. Certification may be required by law prior to making any such connection. Contact an IBM representative or reseller for any questions.

Hardware requirements

These SDDs must be installed in selected System x or BladeCenter servers with SATA or SAS capability based on selected drives.

Software requirements

The new IBM SAS and SATA SSDs work with most operating systems.

For further information, contact your IBM representative.

Compatibility

For latest compatibility information, visit

http://www-03.ibm.com/systems/info/x86servers/serverproven/compat/us/

Note: Some configurations may not be compatible.

Limitations

Solid-state memory cells have an intrinsic, finite number of write cycles that each cell can incur. As a result, each solid-state drive has a maximum amount of writes it can be subjected to, documented as Total Bytes Written (TBW). IBM is not responsible for replacement of hardware that has reached the maximum guaranteed number of write cycles. This limit may be revealed as the SSD drive failing to respond to system-generated commands or becoming incapable of being written to. In general, it is important to distinguish enterprise value drives from enterprise drives.

Enterprise drives have much higher write endurance and as a result can withstand a greater number of writes over the lifetime of the device compared to enterprise value level drives. SSD write endurance is an important factor to consider because unlike spinning disk media, NAND flash has a finite number of program/erase cycles it will accept. SSD write endurance is typically measured by the number of program/erase cycles, or P/E cycles, each cell incurs over its lifetime, and per drive is listed as Total Bytes Written (TBW) in the drive specification. This statistic can be used to give an estimate of the drive's remaining life based on the workload to which the drive will be subjected. The TBW value assigned to a solid-state drive is the total bytes of written data (based on number of P/E cycles) a drive can be guaranteed to complete. Reaching this limit does not cause the drive to immediately fail; it simply denotes the maximum number of writes that can be guaranteed.

A solid-state drive will not fail upon reaching the specified TBW. At some point based on manufacturing variance margin, after surpassing the TBW value, the drive will reach the end-of-life point, at which the drive will go into a read-only mode.

As a result of the technology limitations, care must be taken to use SSDs in environments that will not exceed the TBW of the drive prior to the required life expectancy of the application.

As an example, assume an access pattern of 50% random data and 50% sequential data with block size mixes of 5% of the data is 4k block size, 5% of the data is 8k block size, 10% of the data is 16k block size, 35% of the data is 64k block size, and 35% of the data is 128k block size. For a drive capable of 72 TB of lifetime writes, assuming an approximation of the workload stated above as being worst case, the drive workload must be limited to no more than 40 GB of writes per day to last 5 years and stay inside the 72 TBW limit. For the device to last 3 years, the drive write workload must be limited to no more than 65 GB of writes per day.

Additional information is available at

http://www-03.ibm.com/systems/x/options/storage/solidstate/index.html

Solid-state memory cells have an intrinsic, finite number of program/erase cycles that each cell can incur. As a result each solid-state device has a maximum amount of program/erase cycles to which it can be subjected, documented as TBW (Total Bytes Written) or Drive Writes Per Day (DWPD). IBM's warranty for the device is limited to drives that have not reached the maximum guaranteed number of program/erase cycles, as stated below. A drive that reaches this limit may fail to operate according to its specifications.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 70 TB TBW on the 2.5-inch 120 GB SATA SSD HS and SS depending on workload and data patterns.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 140 TB TBW on the 2.5-inch 240 GB SATA SSD HS and SS depending on workload and data patterns.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 275 TB TBW on the 2.5-inch 480 GB SATA SSD HS and SS depending on workload and data patterns.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 450 TB TBW on the 2.5-inch 800 GB SATA SSD HS and SS depending on workload and data patterns

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 45 TB TBW on the 1.8-inch 80 GB SATA SSD depending on workload and data patterns

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 140 TB TBW on the 1.8-inch 240 GB SATA SSD depending on workload and data patterns

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 225 TB TBW on the 1.8-inch 400 GB SATA SSD depending on workload and data patterns

Maximum warranted writes per drive is 3650TB TBW on the 3.5-inch 200 GB SAS SSD depending on workload and data patterns.

Maximum warranted writes per drive is 7300TB TBW on the 3.5-inch 400 GB SAS SSD depending on workload and data patterns.

Maximum warranted writes per drive is 14,600TB TBW on the 3.5-inch 800 GB SAS SSD depending on workload and data patterns.

User group requirements

This announcement satisfies or partially satisfies the requirements from one or more of the worldwide user group communities. Groups include COMMON, COMMON Europe, Guide Share Europe (GSE), InterAction (Australia/New Zealand), Japan Guide Share (JGS), and SHARE Inc.

Planning information

Customer responsibilities

The new IBM SATA 1.8-inch and 2.5-inch MLC Enterprise Value SSD products and the IBM SAS 3.5-inch MLC Enterprise products are designed as customer setup. Customer installation instructions are shipped with each option part.

Cable orders

None

Installability

The IBM SATA and SAS SSDs require about 20 minutes for installation.

Installation includes unpacking, attaching a customer-provided line cord, setting up, and powering on.

Packaging

IBM 80/240/400 GB 1.8-inch and 120/240/480/800 GB 2.5-inch

Product	Package description	Boxes
S3500 80 GB, 240 GB and 400 GB 1.8-inch SSD and 120 GB, 240 GB, 480 GB and 800 GB 2.5-inch HS and SS SATA MLC Enterprise Value SSDs	Option Unit Box	1
IBM 200 GB, 400 GB, and 800 GB 3.5-inch HS SAS MLC Enterprise SSDs	Option Unit Box	1
	Contents:	
	SSD Important Notices and IBM Warranty Publication, SSD Information Flyer	

The S3500 Enterprise Value SSDs are shipped as a single package. Other items are in zipped bags.

Retail only

IBM 80 GB, 240 GB, and 400 GB 1.8-inch MLC SSDs

Packaging dimensions/weight - SATA 1.8-inch SSDs

- Single box (HxWxD): 32.0 mm (1.26 in) x 226.0 mm (8.90 in) x 150.0 mm (5.90 in)
- Package weight: 399 g (0.88 lb)

IBM 120 GB, 240 GB, 480 GB, and 800 GB 2.5-inch HS and SS MLC SSDs

Packaging dimensions/weight - SATA 2.5-inch SSDs

- Single box (HxWxD): 133.0 mm (5.24 in) x 174.0 mm (6.85 in) x 63.0 mm (2.48 in)
- Package weight: 434 g (0.96 lb) (may vary slightly based on SSD).

IBM 200 GB, 400 GB, and 800 GB SAS 3.5-inch HS Enterprise SSDs

Packaging dimensions/weight - SAS 3.5-inch SSDs

- Single box (HxWxD): 63.0 mm (2.48 in) x 133.0 mm (5.24 in) x 174.0 mm (6.85 in)
- Package weight: 484 g (1.07 lb)

Note: All measurements are approximate.

Supplies

For end users:

IBM SATA 1.8-inch and 2.5-inch SSDs and SAS 3.5-inch SSDs can be purchased through dealers around the world.

Security, auditability, and control

It is a customer's responsibility to ensure that the server is secure to prevent sensitive data from being removed.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

IBM Electronic Services

Electronic Service Agent™ and the IBM Electronic Support web portal are dedicated to providing fast, exceptional support to IBM Systems customers. The IBM Electronic Service Agent tool is a no-additional-charge tool that proactively monitors and reports hardware events, such as system errors, performance issues, and inventory. The Electronic Service Agent tool can help you stay focused on your company's strategic business initiatives, save time, and spend less effort managing day-to-day IT maintenance issues. Servers enabled with this tool can be monitored remotely around the clock by IBM Support all at no additional cost to you.

Now integrated into the base operating system of AIX® 5.3, AIX 6.1, and AIX 7.1, Electronic Service Agent is designed to automatically and electronically report system failures and utilization issues to IBM , which can result in faster problem resolution and increased availability. System configuration and inventory information collected by the Electronic Service Agent tool also can be viewed on the secure Electronic Support web portal, and used to improve problem determination and resolution by you and the IBM support team. To access the tool main menu, simply type "smitty esa_main", and select "Configure Electronic Service Agent ." In addition, ESA now includes a powerful web user interface, giving the administrator easy access to status, tool settings, problem information, and filters. For more information and documentation on how to configure and use Electronic Service Agent , refer to

http://www.ibm.com/support/electronic

The IBM Electronic Support portal is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. This portal enables you to gain easier access to IBM resources for assistance in resolving technical problems. The My Systems and Premium Search functions make it even easier for Electronic Service Agent tool-enabled customers to track system inventory and find pertinent fixes.

Benefits

Increased uptime: The Electronic Service Agent tool is designed to enhance the Warranty or Maintenance Agreement by providing faster hardware error reporting and uploading system information to IBM Support. This can translate to less wasted time monitoring the "symptoms," diagnosing the error, and manually calling IBM Support to open a problem record. Its 24x7 monitoring and reporting mean no more dependence on human intervention or off-hours customer personnel when errors are encountered in the middle of the night.

Security: The Electronic Service Agent tool is designed to be secure in monitoring, reporting, and storing the data at IBM . The Electronic Service Agent tool securely transmits either via the Internet (HTTPS or VPN) or modem, and can be configured to communicate securely through gateways to provide customers a single point of exit from their site. Communication is one way. Activating Electronic Service Agent does not enable IBM to call into a customer's system. System inventory information is stored in a secure database, which is protected behind IBM firewalls. It is viewable only by the customer and IBM . The customer's business applications or business data is never transmitted to IBM .

More accurate reporting: Since system information and error logs are automatically uploaded to the IBM Support center in conjunction with the service request, customers are not required to find and send system information, decreasing the risk of misreported or misdiagnosed errors. Once inside IBM , problem error data is run through a data knowledge management system and knowledge articles are appended to the problem record.

Customized support: Using the IBM ID entered during activation, customers can view system and support information in the "My Systems" and "Premium Search" sections of the Electronic Support website at

http://www.ibm.com/support/electronic

My Systems provides valuable reports of installed hardware and software using information collected from the systems by Electronic Service Agent . Reports are available for any system associated with the customer's IBM ID. Premium Search combines the function of search and the value of Electronic Service Agent information, providing advanced search of the technical support knowledgebase. Using Premium Search and the Electronic Service Agent information that has been collected from their system, customers are able to see search results that apply specifically to their systems.

For more information on how to utilize the power of IBM Electronic Services, contact your IBM Systems Services Representative, or visit

http://www.ibm.com/support/electronic

Terms and conditions

MES discount applicable

No

Field installable feature

Yes

Warranty period

One year limited warranty[1] , or system warranty

An IBM part or feature installed during the initial installation of an IBM machine is subject to a full warranty effective on the date of installation of the machine. An IBM part or feature that replaces a previously installed part or feature assumes the

remainder of the warranty period for the replaced part or feature. An IBM part or feature added to a machine without replacing a previously installed part or feature is subject to a full warranty effective on its date of installation. Unless specified otherwise, the warranty period, type of warranty service, and service level of a part or feature are the same as those for the machine in which it is installed.

Customer setup

Yes

Machine code

No license terms apply

Optional features warranty period

One year limited warranty[1] .

Solid-state memory cells have an intrinsic, finite number of program/erase cycles that each cell can incur. As a result each solid-state device has a maximum amount of program/erase cycles to which it can be subjected, documented as TBW (Total Bytes Written) or Drive Writes Per Day (DWPD). IBM's warranty for the device is limited to drives that have not reached the maximum guaranteed number of program/erase cycles, as stated below. A drive that reaches this limit may fail to operate according to its specifications.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 70 TB TBW on the 2.5-inch 120 GB SATA SSD HS and SS depending on workload and data patterns.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 140 TB TBW on the 2.5-inch 240 GB SATA SSD HS and SS depending on workload and data patterns.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 275 TB TBW on the 2.5-inch 480 GB SATA SSD HS and SS depending on workload and data patterns.

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 450 TB TBW on the 2.5-inch 800 GB SATA SSD HS and SS depending on workload and data patterns

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 45 TB TBW on the 1.8-inch 80 GB SATA SSD depending on workload and data patterns

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 140 TB TBW on the 1.8-inch 240 GB SATA SSD depending on workload and data patterns

Maximum warranted drive writes per drive is 0.3 Full Drive Writes per day for five years or 225 TB TBW on the 1.8-inch 400 GB SATA SSD depending on workload and data patterns

Maximum warranted writes per drive is 3650TB TBW on the 3.5-inch 200 GB SAS SSD depending on workload and data patterns.

Maximum warranted writes per drive is 7300TB TBW on the 3.5-inch 400 GB SAS SSD depending on workload and data patterns.

Maximum warranted writes per drive is 14,600TB TBW on the 3.5-inch 800 GB SAS SSD depending on workload and data patterns.

Prices

For current prices, contact IBM at 888-Shop-IBM (746-7426) or visit

http://www-03.ibm.com/systems/x/

To locate the web price, search on the feature number in the Search field.

Description	Part number
S3500 80 GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	00AJ040 [2]
S3500 240 GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	00AJ045 [2]
S3500 400 GB SATA 1.8" MLC Enterprise Value SSD for IBM System x	00AJ050
S3500 120 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	00AJ000
S3500 120 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	00AJ020
S3500 240 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	00AJ005
S3500 240 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	00AJ025
S3500 480 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	00AJ010
S3500 480 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	00AJ030
S3500 800 GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x	00AJ015
S3500 800 GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x	00AJ035
IBM 200 GB SAS 3.5-inch MLC HS Enterprise SSD for IBM System x	00W1306
IBM 400 GB SAS 3.5-inch MLC HS Enterprise SSD for IBM System x	00W1311
IBM 800 GB SAS 3.5-inch MLC HS Enterprise SSD for IBM System x	00W1316

Field install only	Plant install only	MES removal	Cables required
N	N	N	N

[2] If field installed on a purchased machine, parts removed or replaced become the property of IBM and must be returned.

The following are features already announced for the 2582 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD					

for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 2583 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KR	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KS	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KT	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KU	Initial		
	MC1		Initial		

The following are features already announced for the 3331 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
IBM 200GB SAS 3.5" MLC HS Enterprise SSD					
	HC1	A3HT	MES		
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	HC1	A4KM	MES		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	HC1	A4KN	MES		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	HC1	A4KP	MES		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					

	HC1	A4KQ	MES		
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	HC1	A4KR	MES		
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	HC1	A4KS	MES		
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	HC1	A4KT	MES		
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	HC1	A4KU	MES		
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	HC1	A4KV	MES		
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	HC1	A4KW	MES		
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	HC1	A4KX	MES		
IBM 400GB SAS 3.5" MLC HS Enterprise SSD					
	HC1	A4N8	MES		
IBM 800GB SAS 3.5" MLC HS Enterprise SSD					
	HC1	A4N9	MES		

The following are features already announced for the 7143 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KV	Initial		
	MC1		Initial		
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KW	Initial		
	MC1		Initial		
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KX	Initial		
	MC1		Initial		

The following are features already announced for the 7147 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		

	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KV	Initial		
	MC1		Initial		
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KW	Initial		
	MC1		Initial		
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KX	Initial		
	MC1		Initial		

The following are features already announced for the 7160 machine type: -

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KR	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KS	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KT	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KU	Initial		
	MC1		Initial		

The following are features already announced for the 7382 machine type

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES

S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x				
	AC1	A4KM	Initial	
	MC1		Initial	
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x				
	AC1	A4KN	Initial	
	MC1		Initial	
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x				
	AC1	A4KP	Initial	
	MC1		Initial	
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x				
	AC1	A4KQ	Initial	
	MC1		Initial	

The following are features already announced for the 7383 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 7870 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 7873 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for					

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
IBM System x					
	AC1	A4KV	Initial		
	MC1		Initial		
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KW	Initial		
	MC1		Initial		
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KX	Initial		
	MC1		Initial		

The following are features already announced for the 7875 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 7906 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 7912 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KR	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					

	AC1	A4KS	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KT	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC SS Enterprise Value SSD for IBM System x					
	AC1	A4KU	Initial		
	MC1		Initial		
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KV	Initial		
	MC1		Initial		

The following are features already announced for the 7914 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 7915 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		
S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KV	Initial		
	MC1		Initial		
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KW	Initial		
	MC1		Initial		
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KX	Initial		

	MC1		Initial		

The following are features already announced for the 7917 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 8038 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

The following are features already announced for the 8722 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

S3500 80GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KV	Initial		
	MC1		Initial		
S3500 240GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KW	Initial		
	MC1		Initial		
S3500 400GB SATA 1.8" MLC Enterprise Value SSD for IBM System x					
	AC1	A4KX	Initial		
	MC1		Initial		

The following are features already announced for the 8737 machine type:

Description	Model number	Feature number	Initial/ MES/ Both support	CSU	RP MES
S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KM	Initial		
	MC1		Initial		
S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KN	Initial		
	MC1		Initial		
S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KP	Initial		
	MC1		Initial		
S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD for IBM System x					
	AC1	A4KQ	Initial		
	MC1		Initial		

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